

DELTA PROTECTION COMMISSION

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**AGENDA ITEM #12**

July 9, 1999

To: Delta Protection Commission

From: Margit Aramburu, Executive Director

Subject: Proposed Prospect Island Habitat Restoration Project

Background:

In 1995, Corps of Engineers staff presented five alternatives for habitat restoration to the Delta Protection Commission (June 1995 staff report attached). Commissioner Bob Potter, representing Department of Water Resources, had suggested the Commission might want to support the proposed project. The Commission decided it was not prepared to support the proposed project, and asked that the project return at a later date (see attached minutes of June 1995 meeting).

In October of 1997, a Negative Declaration for the proposed project was circulated. Staff submitted comments on the document in a letter dated December 1, 1997 (copy attached). The comments focus on requests for additional information about the hydrology of the project; the proposed management of the site; public access and/or recreation on the site; and evaluation of the loss of agricultural land, as required under State and federal laws.

Proposed Project:

Prospect Island is a 1,316 acre island located in Yolo Bypass in Solano County and located in the Primary Zone of the Delta. The project site is the eastern portion of the original island which was divided by the Sacramento Deepwater Ship Channel. The project site is owned by the Bureau of Reclamation; the habitat restoration project is proposed by the Corps of Engineers and the Department of Water Resources (local partner). The southernmost portion of Prospect Island (309 acres) is owned by the Port of Sacramento. Department of Fish and Game owns a 36-acre parcel south of the Port's property which is subject to tidal action.

The proposed project, Study Alternative Five (site plan attached), would break through the existing levee in two locations at the southern end of the site; dredge a five foot deep by 60 to 100 foot wide main channel from those two breaks to the north; dredge several five foot deep by 60 foot wide dead-end sloughs; create a series of narrow islands using the material dredged from the new channels; and rebuild the eastern levee to a 10:1 slope and a 30 foot wide berm. When the site is opened to tidal action, the southern portion would be permanently covered with water. The water depth would be shallower at the northern end, thus creating a mosaic of aquatic and tidal habitats (deepwater, emergent vegetation, and riparian). The site would create spawning and nursery habitat for resident Delta fishes (Delta smelt and splittail) and resting and feeding areas for migratory fish, such as salmon. The habitat enhancement would also benefit a number of other species.

After the initial construction and monitoring period, the Corps plans to turn management of the site over to its local partner--the Department of Water Resources. The Department, in turn, plans to have the site managed by the U.S. Fish and Wildlife Service as part of the proposed North Delta National Wildlife Refuge.

Status:

The Corps and Department of Water Resources plan to release the final negative declaration in mid-July. After circulation and final approval, the project will be constructed.

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June 9, 1995

To: Delta Protection Commission
From: Margit Aramburu, Executive Director
Subject: Briefing and Possible Resolution of Support for Habitat Restoration Project on Prospect Island, Solano County

Background:

At the last meeting, a representative of the Sacramento Corps of Engineers, Leslie Lew, made a brief presentation regarding the proposed habitat restoration project on Prospect Island and asked to be placed on the agenda for a full briefing and possible support of the proposed project. The Commission agreed.

Project Location:

The proposed project is located on a 1,316 acre area in the Yolo Bypass in Solano County in the Primary Zone of the Delta (see Exhibit A). The site is bounded by the Sacramento Deep Water Ship Channel to the west, Little Holland Tract to the north, and Miner Slough to the east and south. The southern 309 acres of the area is owned by the Port of Sacramento and used for disposal of dredged material and future mitigation. The Department of Fish and Game owns a 36-acre parcel south of the Port's parcel; the site is natural wetland habitat.

Description of the Site:

The Island is generally flat with man-made levees ringing the Island. The terrain generally slopes upward at the northern portion of the site. The elevations ranges from 2 feet above mean sea level at the northern end to -5 feet below mean sea level at the southern end of the site. The groundwater table is estimated to vary between 1 and 4 feet in depth.

The levees range from about 10 feet to 17 feet above mean sea level. The Ship Channel and Miner Slough levees are riprapped.

The soils are organic, erodible, and soft. The soils include Sacramento silty clay loam, Ryde clay loam, Columbia fine sandy loam, Valdez silt loam, and dredge spoil.

Other than agricultural crops, vegetation is limited to riparian vegetation on a bench of up to 40 feet wide outside the levee. About two-thirds of the perimeter of the site is ringed with riparian vegetation.

Uses of the Island:

The Island has been used for row crop and grain production. Crops include corn, safflower, sugar beets, and wheat.

There is no recreational use of Prospect Island.

There are no public roads on Prospect Island.

History of Flooding:

Levees completely surround the site. The Ship Channel levee is maintained by the Corps. The other levees are maintained by the landowners, formerly Reclamation District 1667, now the Bureau of Reclamation. The Prospect Island levees were intentionally designed to be low to allow Prospect Island to flood before surrounding islands to the north and east. Prospect Island was flooded in 1980, 1982, 1983, and 1986. and 1995.

Purpose of the Project:

The project has dual goals of decreasing or eliminating maintenance costs on the Ship Channel levees on Prospect Island and restoring fish and wildlife habitat. Abandoning maintenance along the study area portion of the Ship Channel levee would allow the Corps to realize a cost savings of about \$212,000 per year.

Proposed Project:

The Corps developed five preliminary alternatives and two final alternatives. All would include:

- * Breach the ship channel levee in either one or two locations; each breach to be about 250 feet long; riprap the breach areas.
- * Create interior islands to dissipate wave energy from wind generated waves and for habitat.
- * Final Alternative 1a includes: two smaller breaches, island construction and planting, relocation of power poles, removal of pumps, etc, construction of a new vehicle road and a bridge across the breach on Miner Slough levee.

* Final Alternative 1b includes: the same elements as 1a, but less costs on island creation and planting (see Exhibit B).

Project Costs:

Alternative 1:	\$10,753,000
Alternative 2:	\$74,169,000
Alternative 2a:	\$72,468,000
Alternative 3:	\$138,047,000
Final Alternative 1a:	\$26,406,000
Final Alternative 1b:	\$10,453,000

Possible Funding Source: The Prospect Island restoration project is listing for possible funding under the "Category III" funding program. The funding would be split over two years.

Project Participants:

- * Sacramento Corps of Engineers
- * U.S. Fish and Wildlife
- * Bureau of Reclamation
- * Bureau of Land Management
- * National Marine Fisheries Service
- * Department of Water Resources
- * Department of Fish and Game
- * Port of Sacramento
- * Solano County Water Agency
- * Trust for Public Lands

History of Ownership:

Prospect Island was previously in private ownership by Sakata Brothers out of Clarksburg. In 1993, Trust for Public Lands purchased an option on Prospect Island with the intent of acquiring the property and then selling it to the Bureau of Reclamation, or otherwise assisting in public acquisition. The purchase price was approximately \$2,800,000 (\$2,200 per acre).

Nearby Pending and Proposed Projects:

1. Sacramento Deep Water Ship Channel deepening. Most of the Channel and Port facilities were completed in 1963. A project to deepen the channel by 5 feet and to widen the Channel began in 1989 and is currently stopped.
2. Little Holland Tract Reconnaissance Investigation. A study of restoring wetland habitat is due in January 1996. The area has been inundated and subject to tidal action continually since the levees failed in 1983.

Sources:

U.S. Army Corps of Engineers, Reconnaissance Report:
Prospect Island Fish and Wildlife Habitat Restoration Study,
Solano County, California, April 1995.

Trust for Public Lands, Memo and Maps, no date, received
January 7, 1994.

DRAFT

Resolution in Support of Habitat Enhancement on
Prospect Island, Solano County

WHEREAS the Bureau of Reclamation has acquired a 1,228 acre parcel on Prospect Island in Solano County in the Primary Zone of the Delta; and

WHEREAS farming of the subject property was threatened by the flood easement on the site to allow for flooding of the island to protect properties on nearby islands; and

WHEREAS the proposed project will lessen high annual costs associated with Corps maintenance responsibilities for the levee along the Sacramento Deep Water Ship Channel; and

WHEREAS the proposed project will provide restoration of 1,228 acres of riparian and wetland habitat which was previously existing on the site and which will provide habitat for several rare and endangered species and a variety of aquatic and terrestrial species; and

WHEREAS the Delta Protection Act of 1992 (Act) states "that the Sacramento-San Joaquin Delta is a natural resource of statewide, national and international significance, containing irreplaceable resources and it is the policy of the state to recognize, preserve, and protect those resources of the delta for the use and enjoyment of current and future generations"; and

WHEREAS the Act states "the basic goals of the state for the delta are...protect, maintain, and where possible, enhance and restore the overall quality of the delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities"; and

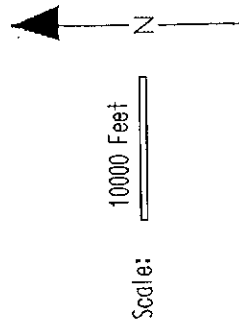
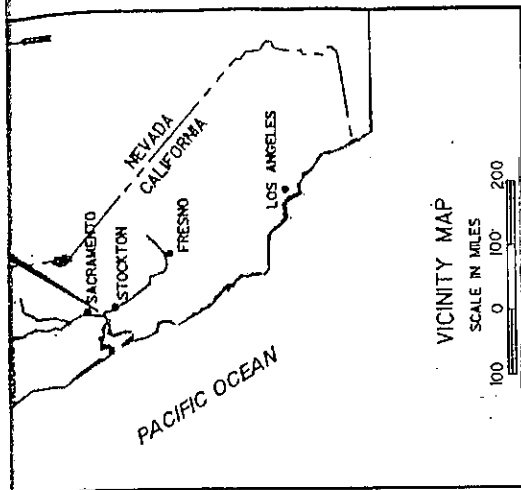
WHEREAS the site is surrounded by waterways and other publicly owned lands and the habitat restoration project has been designed so it will not adversely impact nearby agricultural and other land uses; and

WHEREAS restoration of the site to aquatic and wetland habitat will control and eventually reverse the process of subsidence which is associated with draining of the Delta's peat soils; and

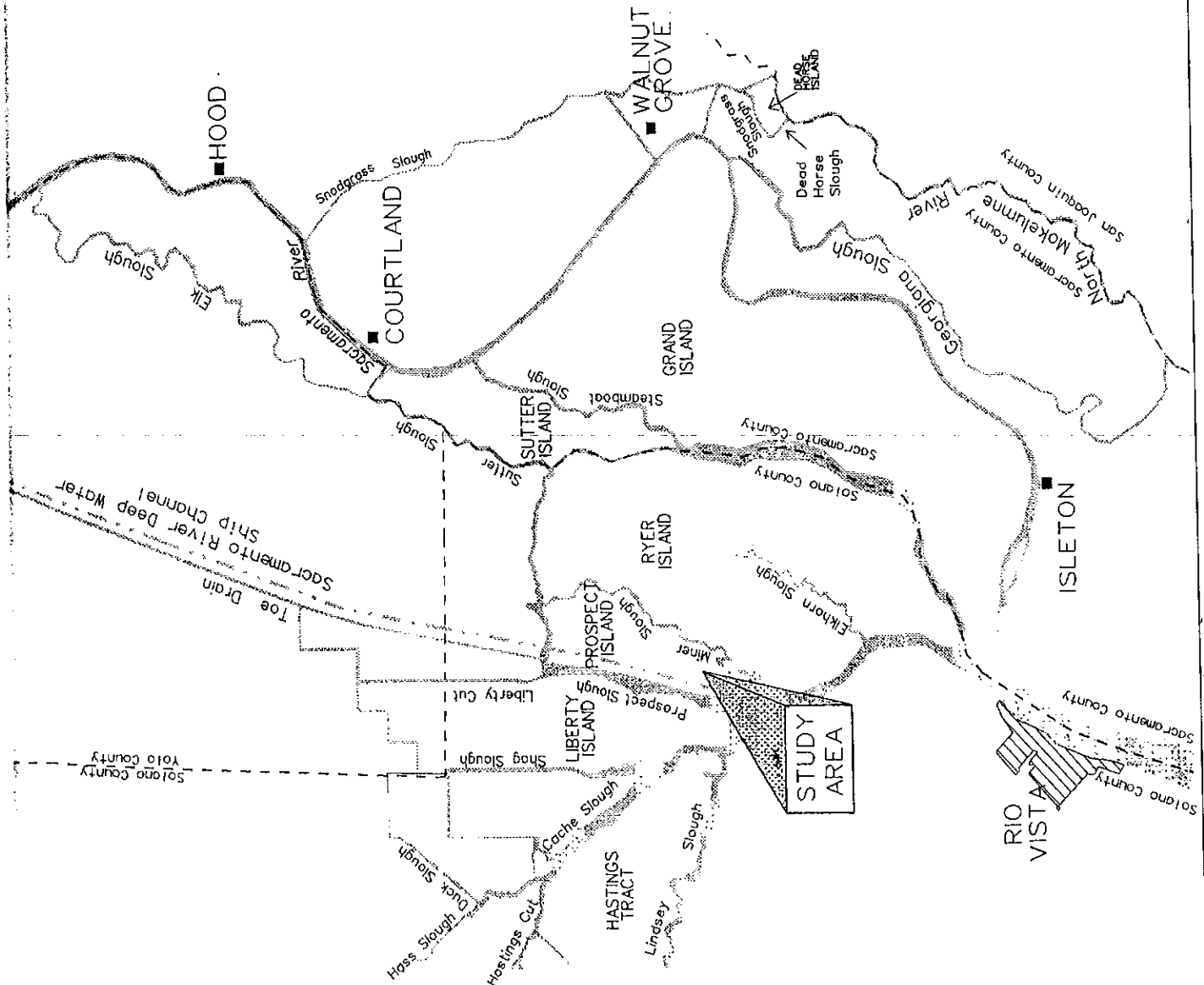
WHEREAS the lands will be managed to provide several inter-related habitats; and

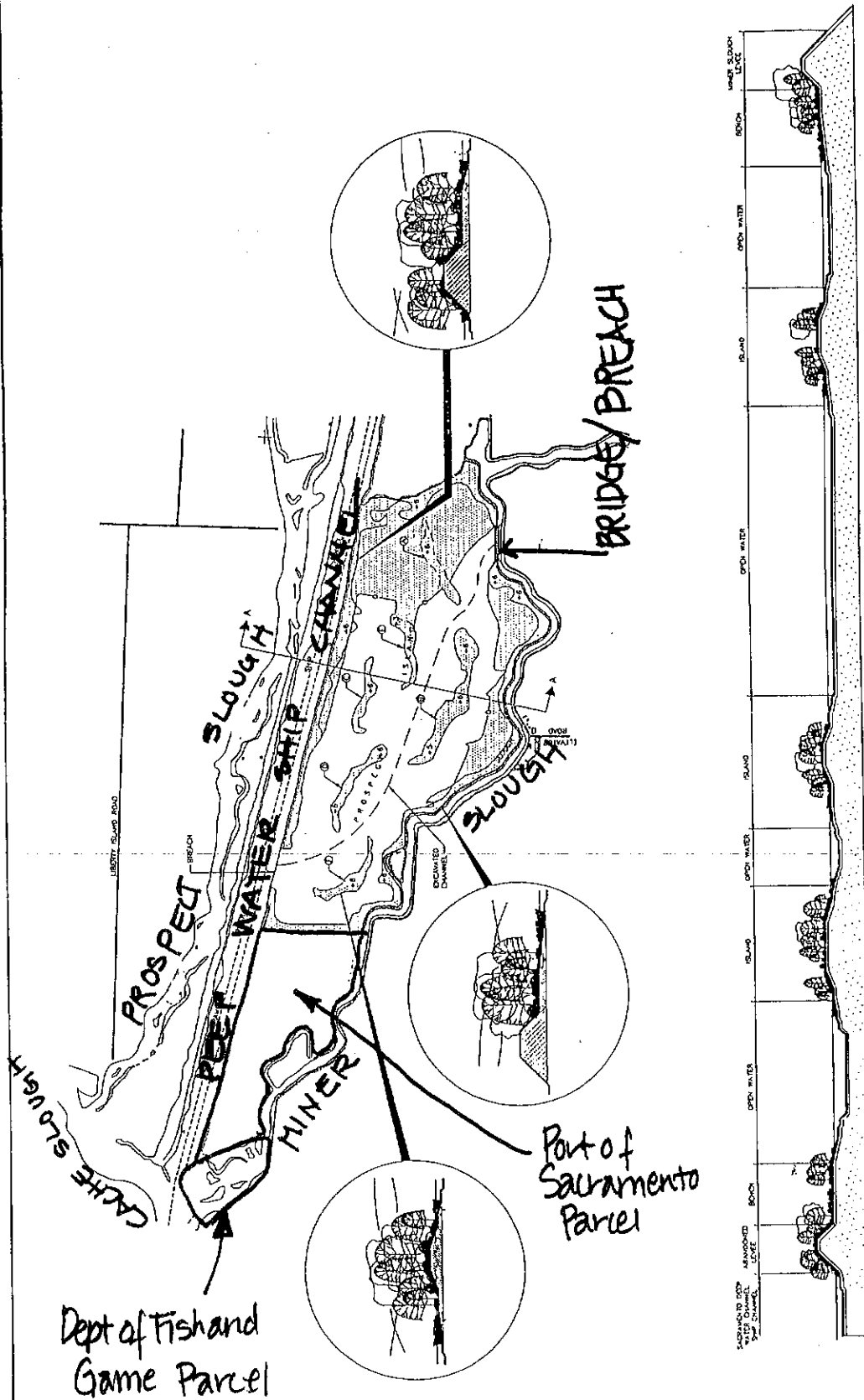
WHEREAS the project has been developed in coordination with a number of local, state and federal agencies and non-profit groups;

NOW THEREFORE BE IT RESOLVED that the Delta Protection Commission supports the proposed project to restore aquatic and wetland wildlife habitat on Prospect Island, Solano County.



GENERAL INVESTIGATIONS
**Prospect Island Fish
and Wildlife Habitat
Restoration Investigation**
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
SACRAMENTO, CALIFORNIA





SECTION A-A

PROSPECT ISLAND

FISH & WILDLIFE HABITAT RESTORATION

STUDY ALTERNATIVE #1B



EXHIBIT
B

CORPS OF ENGINEERS, SACRAMENTO DISTRICT



concerned that the point of the process is increased exports from the Delta which will result in a peripheral canal; Commissioner Potter said Pat McCarty will help to represent the Delta on BDAC but the stakeholders is not a public group. Commissioner Fargo asked for information about the stakeholders.

Carl Amundson from Florin Resource Conservation District asked how the process would be coordinated with the Bay Protection Toxic Clean-up Committee; Mr. Snow said he will coordinate with the State Water Resources Control Board.

9. Briefing by Corps of Engineers on Prospect Island Wildlife Habitat Project (Solano County).

Chairman McCarty introduced Leslie Lew and Lynn O'Leary of the Corps staff. Commissioner Potter introduced Walter Yep, Chief of Planning for the Sacramento Corps office.

Ms. O'Leary reviewed planning projects underway by the Corps. These include: Sacramento-San Joaquin Special Study, with DWR and the Reclamation Board: a regional plan for flood control, navigation and environmental restoration; Sacramento River Salmon Study: includes study of the lock at Port of Sacramento; West Delta Islands (Reconnaissance Report): Jersey, Webb and Twitchell Islands; recommends further study of Twitchell; Little Holland Tract and Liberty Island: currently flooded, studying further restoration.

Commissioner Mello asked if the Corps is addressing work on non-project levees indicating that redirected flows have impacts on non-project levees; Ms O'Leary said yes.

Commissioner Calone asked if there are programs to protect existing wetlands, such as the wetlands on Winter Island; Ms O'Leary said yes, to the south of the Delta on China Island. She suggested working with the regulatory staff. Commissioner Potter said Winter Island may be in a different Corps district.

Commissioner Murphy asked if current programs to downsize federal projects would eliminate some of these programs; Ms. O'Leary and Mr. Yep said none of these projects will be affected.

Ms. Lew presented a report on the proposed Prospect Island including slides of the site and adjacent lands. She outlined the proposal to break the levee in two locations, modify some levees to a 10 to 1 slope; construct islands; and plant areas.

Commissioner Mello asked if the project would affect neighbors through flooding or seepage, or if the project would affect common farming practices on nearby agricultural lands. Ms. Lew suggested all concerns would be addressed in the final project design.

Commissioner Curry asked the velocity and depth of the channel and asked if boaters would be allowed; Ms. Lew said the channel would allow 5 cfs through the site and boating would be allowed but restricted to non-motorized vessels.

Commissioner Simas asked how much land was formerly farmed and what would be the annual economic loss; Ms. Lew said that 1,200 acres would be retired from farming and that an old study indicated that income from the property was approximately \$200,000 per year.

Commissioner Broddrick commented that the levee work is not typical, but is similar to a stabilization project.

Commissioner Mello asked more questions about the current levee maintenance costs and future maintenance costs; Ms. Lew said the current costs are about \$300,000 per year and would be reduced to approximately \$90,000 per year.

Commissioner Potter said he had visited the site and said it is almost in the Yolo Bypass and is designed to be flooded and will protect adjacent properties.

10. Commission Consideration and Possible Adoption of Resolution in Support of the Prospect Island Project.

Chairman McCarty asked for comments on the proposed resolution.

Neil Hamilton, Ryer Island, RD #501, said flooding on Prospect affects Ryer Island and asked the Commission to postpone consideration of the proposed project until he can make a more formal presentation.

Tom Hester, Ryer Island, said due to seepage he is not able to plant all his land; the water is coming from Prospect Island. He said if Prospect Island is permanently flooded, that will change cropping patterns and affect land values.

Commissioner Mello asked if Prospect Island drains without pumping.

Commissioner Potter asked if the Port's levee has been repaired; Ms. Lew did not know. He asked if there had been a study of the hydraulic connection between Prospect and Ryer Islands; Ms. Lew said the Corps will study any possible

problems, such as seepage and will not pursue a project that would adversely impact neighboring lands.

Priscilla Vidisky of Bethel Island, said she is concerned that the Corps may breach a levee, yet won't let Bethel Island break through its' levee.

Commissioner Murphy asked the difference between the 26 million dollar estimate and the ten million dollar estimate; Ms. Lew said it breaks down according to the amount of dirt to be moved and amount of planting. The estimate is now 7 million dollars; funds have been spent on acquisition.

Commissioner Hill said the project looks good, however, he wants more information about the possible impacts to the neighbors and expressed concerns about project costs.

Commissioner Simas raised concern about the amount of funds spent planning in the last year without developing information about the seepage issue, he said he has major concerns about the impacts to the neighbors.

Commissioner Nottoli said action on the resolution appears premature and asked that the project return with environmental documentation and with a presentation from the neighbors.

Commissioner Mello agreed he is not ready to support the resolution and asked that it be tabled.

Commissioner Calone said he would not support the resolution unless it addresses the concerns of the Ryer Island landowners.

Commissioner Broddrick said the project is a conceptual plan to create habitat and reduce Corps maintenance costs. He asked that the Commission not send a negative message to the Corps, but support creation of habitat on lands that have been sold by the land owner. He thanked the Corps for coming to the meeting and supports the benefits for rare and endangered species and the new venue of the Corps.

Commissioner Fargo agreed with Commissioner Broddrick and said its an issue of timing; she suggested the matter be continued, not tabled and asked when the project could return.

Commissioner Torlakson said DAPC didn't have the opportunity to review projects like this. He suggested that the Commission express interest in assisting to facilitate communication between the Corps and others. He suggested going on record addressing that interest.

Commissioner Simas said he could not support the proposed project; the Corps needs to mitigate the loss of \$200,000 of annual agricultural income and the impacts to Ryer Island.

Commissioner Murphy asked that a revised project address the issue of recreational impacts.

Commissioner Ferreira asked if the funds have been appropriated; Ms. Lew said funds have been appropriated for the next fiscal year; the Corps needs a local sponsor.

Commissioner Simas moved; seconded by Commissioner Torlakson to continue the matter until additional information is presented by the Corps. Commissioner Torlakson suggested that the Commission staff work with the parties to facilities exchange of information. The motion was approved on a voice vote.

11. Budget and Work Program for FY 95-96.

Ms Aramburu outlined the staff report entitled "Proposed Budget and Work Program for Fiscal Year 95-96". She recommended turning unallocated funds toward the Commission's original loan; she outlined the proposed funding for next fiscal year; and she described tasks staff will carry out next fiscal year.

Commissioner Fargo asked why the unallocated are being returned to the ELPF and not designated toward planing programs such as the recreational user study.

On a motion by Commissioner Torlakson and a second by Commissioner Nottoli, the Commission adopted the budget and work program by a voice vote.

12. Commissioner Comments.

Commissioner Ferreira said he had received a letter from Del Monte stating that use of urban-generated biosolids on crops would result in a cancelled contract.

13. Adjourn.

The meeting was adjourned at 9:05 p.m.

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December 1, 1997

Collette Zemitis
Department of Water Resources
3251 S Street
Sacramento, CA 95816

Subject: Negative Declaration: Prospect Island Wildlife Habitat Restoration Project,
Solano County; SCH #97102109

Dear Ms Zemitis:

Thank you for forwarding to the Delta Protection Commission the combined Negative Declaration and Finding of No Significant Impact for the Prospect Island Wildlife Habitat Restoration Project, in a document entitled "Draft Prospect Island Project Modification Report, October 1997". The Commission itself has not had the opportunity to review the material so these are staff comments only. The Delta Protection Commission is a State-authorized regional land use planning agency with no authority over State or federal projects, so these comments are advisory only. One of the Commission's key areas of responsibility is monitoring land use changes in the Delta, and seeking an appropriate balance between the three major land uses in the area: agriculture, wildlife habitat, and recreation.

The project is located in the Primary Zone of the Delta, within the Commission's planning and monitoring area, between the Sacramento Deepwater Ship Channel and Miner Slough. The site is bounded by private property to the north, and lands owned by the Port of Sacramento to the south. The environmental document states there are private lands within the study area. The comments largely ask for additional information so the Delta Protection Commission and staff can understand the nature and extent of improvements proposed for the site.

Plan Formulation:

The stated purpose of the project is twofold: to minimize on-going maintenance costs associated with levee maintenance along the Deepwater Ship Channel, and to provide aquatic and shaded riverine aquatic habitats to mitigate for past losses of similar habitat. To clarify the project, it would be helpful if the environmental document included the following information:

* Clarify, with the use of maps, the proposed water depths on the site at various critical times of the year, including: water elevations during Delta smelt and splittail spawning seasons, at high and low tides and during high water flow years. It would be helpful to understand how the water elevations at the site would be affected by high flows in the Yolo Bypass.

* Describe how the relocation of the second inlet to the site could affect use of the site by salmon migrating upstream, as well as the described use for salmon smolts migrating downstream.

* Describe more clearly and provide maps of the depth of water within the proposed channel. Currently the channel is described as six feet deep and 300 feet wide, however, because of the change in elevation from north to south, the water depth over the unexcavated areas and within the channel will vary, and will vary based on the tide and other factors.

* Describe proposed management of the site, including if the site will be managed for habitat purposes only, or will there be some provisions for public access and/or recreation, and if there will be oversight of the site. In addition, the document should clarify whether there will be physical maintenance, such as removal of exotic plants, from the restoration area.

* The document should include descriptions of other sites in the northern portion of the Delta, i.e. north of State Highway 12, which are owned and/or managed for wildlife purposes, and how the proposed restoration project fits into regional goals for the Delta area. Sites include: Jepsen Prairie Preserve, DFG's property along Calhoun Cut, Yolo Bypass Wildlife Area, restoration areas near the toe of the Yolo Bypass, Little Holland Tract, Cosumnes Preserve, Stones Lakes Wildlife Refuge, and others.

Recreation.

The Commission's adopted land use plan recommends that "State and federal projects in the Primary and Secondary Zones should include appropriate recreation and/or public access components to the extent consistent with project purposes and with available funding."

At a briefing before the Commission in June of 1995, in response to a question from Commissioner Curry, representing Department of Boating and Waterways, regarding boating at the site, Corps staff said boating would be allowed, but restricted to non-motorized vessels. However, neither the 1995 Reconnaissance Report nor the current document clearly outline what public recreational opportunities could or will be provided as part of the project.

The "Prospect Island Wildlife Habitat Restoration Study, Solano, CA Environmental Assessment/Initial Study" (Appendix C) states "Although not designed for such activities, the

proposed project would provide opportunities for bird watching, relaxing, and possible canoeing or kayaking. Access to the property via the road to Arrowhead Harbor would be available to FWS personnel and adjacent landowners who have a gate key." The project description should indicate where the locked gate is to be located and should include a description of opportunities and restrictions for public access and recreation at the site including: small boat launching, boating, fishing, hunting, hiking, biking, picnicking, wildlife observation, etc. The project should include a description and location of any proposed facilities such as signage, small boat launch ramp, parking, paved or unpaved paths, benches, fishing piers, fish cleaning stations, restrooms, etc.

Evaluation of Conversion of Agricultural Land.

The environmental assessment/initial study states (p. 43) "Using the site assessment criteria set forth in the Farmland Protection Policy Act of 1981, as amended in 1994, the site receives 89 out of 160 possible points. According to the Farmland Protection Policy Act, farmland receiving a total farmland conversion impact rating less than 160 need not be given further consideration for protection, and alternative actions do not need to be considered. Based on these criteria, there would be no adverse effect to farmland resulting from implementation of the proposed action."

Review of the Farmland Conversion Impact Rating (Appendix D) against the criteria outlined in Section 658.5 CFR for July 5, 1984 indicate that some of the scores may be inaccurate. The following items should be re-evaluated:

- * Item 4, Protection Provided by State and Local Government, is rated 0 out of 20 points; at the time of acquisition the site was under a Williamson Act contract, was protected by a special Solano County ordinance, and within the Primary Zone of the Delta.
- * Item 6, Distance to Urban Support Services, is rated 10 out of 15 points; there are no nearby water lines, sewer lines, or other local facilities and services which would promote nonagricultural use of the site.
- * Item 7, Size of Present Farm Unit Compared to Average, is rated 9 out of 10 points; the average farm size in Solano County is 391 acres, the site is 1,316 acres.
- * Item 9, Availability of Farm Support Services, is rated 0 out of 5 points; the site does have available an adequate supply of farm support services and markets, as indicated by the farming of the site until purchased by the Bureau of Reclamation.
- * Item 10, On-Farm Investments, is rated 0 out of 20 points; the farm does not have extensive outbuildings and structures, but does have levees, channels, irrigation ditches, pumps, and siphons associated with the agricultural operation.

* Item 12, Compatibility with Existing Agricultural Use, is rated 0 out of 10 points; possible impacts of the proposed conversion on agricultural lands directly to the north (AP 42-190-15, 354 acres) should be evaluated, and possible impacts to Ryer Island to the east should be evaluated. Ryer Island claims there will be adverse impacts from seepage if the project goes forth as proposed. Appendix J, Prospect and Ryer Island Seepage Analysis, states "no definite conclusion can be reached on the relationships between flooding of prospect Island, stage elevations in Miner Slough and groundwater elevation in Ryer Island".

If re-evaluation of the Farmland Conversion Impact Rating brings the site to over 160 points, the environmental document should be modified to include analysis of the impacts of the conversion of these farmlands and should include possible mitigation.

The issue of possible impacts to adjacent lands due to seepage should be studied more thoroughly and more clearly explained in the documents. The information in the document appears inadequate for evaluation of possible impacts; no possible mitigation is described.

Finally, the issue of buffers between newly created habitat and existing agriculture should be addressed. The Commission's Plan recommends that buffers be included in new projects, and those buffers should be adequate to eliminate future conflicts between management of new projects and on-going agricultural activities.

No Excavation Alternative.

The applicants should include an alternative with no excavation of the "floor" of Prospect Island. Other sources of fill material for levee reconstruction and island construction could be obtained from existing stockpiles of dredged material, or material to be dredged in the near future. Dredged material has been used for levee maintenance on other islands, and placement of newly dredged material was the technique used for creation of successful habitat islands at Donlon Island and Little Venice Cut.

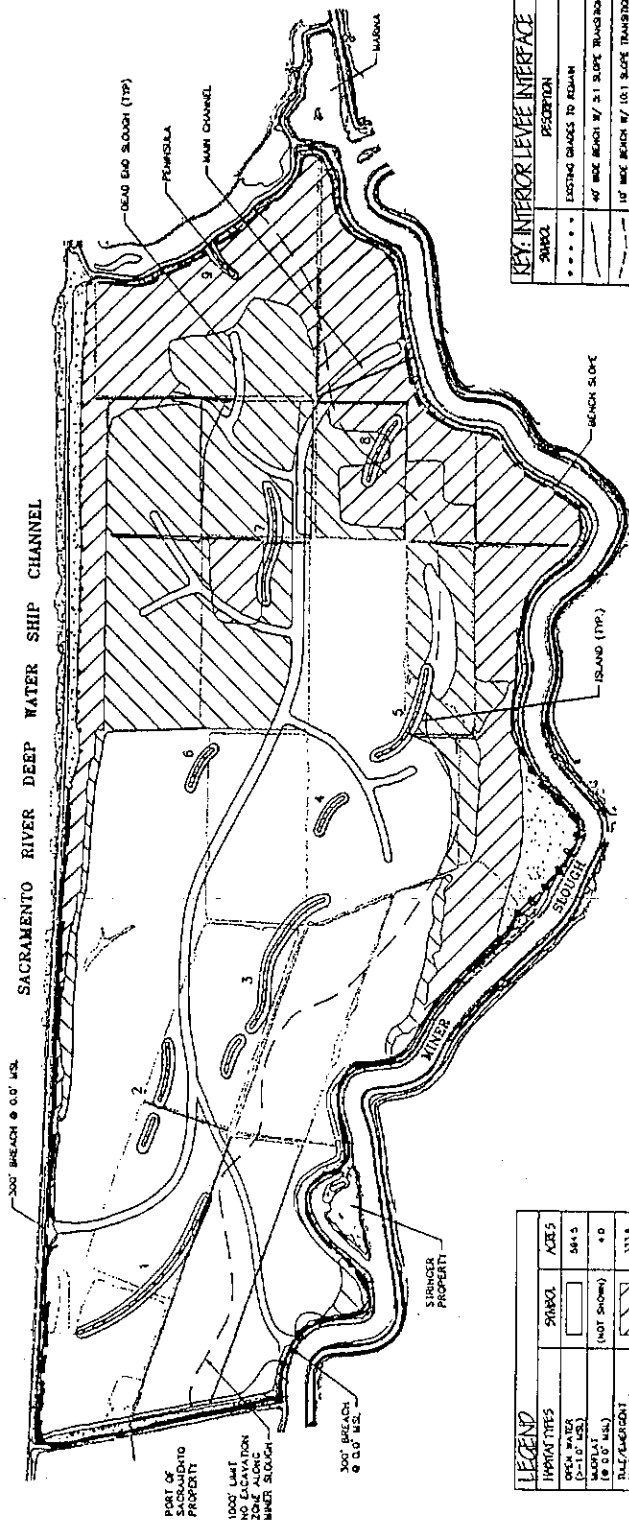
Thank you for the opportunity to comment on the environmental document for the Prospect Island project. Please call if you have questions about these comments.

Sincerely,



Margit Aramburu
Executive Director

cc: Patrick N. McCarty, Chairman
Supervisor Skip Thomson



LEGEND	SIMBO	ACRES
HYPERSTRESS		
DEEP WATER		344.5
MAJOR SLOUGH		4.0
(@ 0.0' MSL)		
PLATEAU/CLIFF		333.8
(0.0' MSL TO 1.0' MSL)		
PLATEAU/CLIFF		330.0
(-0.5' MSL TO 0.0' MSL)		
SAV/SP/AN/PLAND		15.7
(0.0' MSL)		
TOTAL ACRES		1316.0

KEY: INTERIOR LEVEL INTERFACE	DESCRIPTION	FOOTING/17
• • • • •	EXISTING GRADES TO REMAIN	7.825
—	40' WIDE BEACH W/ 2:1 SLOPE TRANSITION	11.119
—	10' WIDE BEACH W/ 10:1 SLOPE TRANSITION	16.233

KEY: ISLAND CONFIGURATIONS	ISLAND CONFIGURATION	ISLAND LENGTH
1	BARRETT ISLAND (40' BEACH/ 40' ISLAND/ 20' BEACH)	2.100
2	STANDARD ISLAND (40' BEACH/ 40' ISLAND/ 20' BEACH)	9.31
3	STANDARD ISLAND	1.821
4	BARRETT ISLAND	3.17
5	BARRETT ISLAND	3.28
6	STANDARD ISLAND	3.11
7	STANDARD ISLAND	1.024
8	BARRETT ISLAND	3.22
9	STANDARD ISLAND	1.48

* ESTIMATED CONFIGURATIONS AND LINEAR FEET

PROSPECT ISLAND

FISH & WILDLIFE HABITAT RESTORATION
STUDY ALTERNATIVE 5



Figure 1. Map of Study Area

